

**Notice of Allowability**

Application No.

10/054,410

Examiner

Chieh M Fan

Applicant(s)

YOUNG ET AL.

Art Unit

2634

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment filed 8/18/04.
2. ☒ The allowed claim(s) is/are 1-16,32-36,61-72,75-79,81-84,86,88,92,93,95-105,113,117,118 and 120.
3. ☒ The drawings filed on 11/13/01 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
  1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |                                                                                                                     |                                                                                        |
|---------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)                                                    | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date _____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment                               |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material          | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance   |
|                                                                                                                     | 9. <input type="checkbox"/> Other _____.                                               |

***Statement of Reasons for Allowance***

1. Claims 1-16, 32-36, 61-72, 75-79, 81-84, 86, 88, 92, 93, 95-105, 113, 117, 118 and 120 are allowed. The following is an examiner's statement of reasons for allowance:

Regarding claims 1-16, the prior art of record does not teach "providing a bit clock signal line separate from said plurality of receive signal lines and said plurality of transmit signal lines for carrying a bit clock signal, which bit clock signal is generated by scaling a separate clock signal useable by the XDSL modem, such that said bit clock is variable to accommodate a plurality of different XDSL transmission protocols."

Regarding claim 32-36, the prior art of record does not teach the limitation "providing a clock signal line, said clock signal line carrying a clock signal adapted for data transfers associated with both the analog codec and the ATM interface; providing a data transfer protocol such that data transfers over said digital communications link can include codec samples and/or ATM cell data; wherein said clock signal further can be varied to accommodate a plurality of different data transfer protocols used in the digital communications link."

Regarding claims 61-66, the prior art of record does not teach "a plurality of XDSL data receiving lines; and a plurality of XDSL data transmitting lines; and a clock signal adapted for an XDSL compatible link, said clock signal being generated by scaling a separate clock signal useable by the XDSL capable modem, such that said clock signal is variable to accommodate a plurality of different XDSL transmission protocols."

Regarding claims 67-72, 75-79, 81 and 82, the prior art of record does not teach the limitation “configuring a bit clock to accommodate transmission requirements of said selected XDSL transmission protocol, said bit clock being generated by scaling a separate clock signal useable by the XDSL modem; wherein said bit clock is variable to accommodate a plurality of different XDSL transmission protocols, and wherein said frame of data is transmitted by dividing said frame of data over multiple communications lines.”

Regarding claims 83, 84, 86 and 88, the prior art of record does not teach the limitation “a bit clock signal line, separate from said plurality of receive signal lines, and said plurality of transmit signal lines, for carrying a bit clock signal to clock transfers between the analog section and the digital controller; wherein said bit clock signal has a variable frequency that can be set to accommodate a plurality of different XDSL transmission protocols.”

Regarding claims 92, 93 and 95-98, the prior art of record does not teach the limitation “generating a separate frame signal for indicating a boundary for a variable sized data frame transmitting the data between the digital controller and the analog CODEC; supporting a scaleable data rate in the digital communications link by adjusting a clock rate of said bit clock and/or a size of said variable sized data frame; wherein said size of said variable sized data frame is adjusted by changing a number of active data channels used in the digital communications link.”

Regarding claims 99-105, the prior art of record does not teach the limitation “a bit clock signal line, separate from said plurality of receive signal lines and said plurality

of transmit signal lines, for carrying a bit clock signal adapted for a transmission protocol supported by the bus protocol; a frame clock signal line for carrying a frame clock signal adapted for clocking a variable sized data frame in accordance with the bus protocol, said variable sized data frame having a size based on a number of active channels in the plurality of separate data channels and/or a desired data rate; wherein said plurality of active lines, said plurality of transmit lines, said bit clock signal line and said frame clock signal line support the bus protocol as part of the communications bus within the personal computer system."

Regarding claims 113, 117, 118 and 120, the prior art of record does not teach the limitation "clocking data transmissions in said first transmission channel and/or said first receive channel over the data link using a scaleable clock signal: (d) setting up a second transmission channel and a second receive channel over the data link between the first integrated circuit and a third integrated circuit to support second transmit data and second receive data respectively using said scaleable clock signal; wherein said scaleable clock signal is adjusted for the data link between the first integrated circuit and the second integrated circuit so that the data link uses a scaleable clock rate to support a data transfer rate required for said first transmission channel and/or said first active channel."

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chieh M Fan whose telephone number is (571) 272-3042. The examiner can normally be reached on Monday-Friday 8:00AM-5:30PM, Alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Chin can be reached on (571) 272-3056. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 872-9306 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.



Chieh M Fan  
Primary Examiner  
Art Unit 2634

cmf  
September 15, 2004